

Fike/Artel Site Trust

Nitro, West Virginia

Reply to: *Fike/Artel Project Coordinator*

450 Montbrook Lane
Knoxville, TN 37919
(865) 691-5052
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July 31, 2000

Ms. Katherine A. Lose
EPA Project Coordinator
Office of Superfund Programs
USEPA-III (3HW23)
1650 Arch Street
Philadelphia, PA 19103-2029

**Reference: Fike/Artel Superfund Site,
Site Subsidence 06/01/2000**

Dear Ms. Lose:

On June 1, 2000 during the installation of the pump test wells we noted two minor subsidences had occurred on the Site and verbally reported them to WVDEP and yourself.

The subsidences were similar in nature to those that previously occurred in April of 1998 and January of 1999. The first hole was located approximately fifty-seven and one-half feet south and one hundred forty-five feet east of the southeast corner of the Miller building and was adjacent to grout from the closure of one of the earlier subsidences. The second hole was located approximately thirty-two and one-half feet south and two hundred and thirty-two feet east of the south east corner of the Miller building.

On June 2, 2000 the first and second subsidences were repaired with ten gallons and thirty-one and one-half gallons of grout, respectively, being injected with the pressure grout rig. This is the first time we have used the pressure grout technique, instead of pouring grout manually into the subsidence. We believe this approach will be more effective in preventing a reoccurrence. Pictures of the two subsidences prior to grouting, during grouting and following grouting are enclosed. Copies of the relevant field notes are also enclosed.

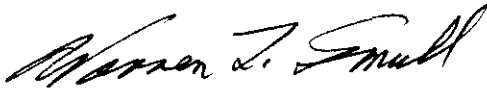
Should you have any questions concerning this matter, please call me at (865) 691-5052.

AR301675



Ms. Katherine A. Lose
July 31, 2000
Page 2 of 2

Sincerely,



Warren L. Smull
Project Coordinator

Enclosures

WLS/mw

cc: Wendell Barner
J. F. Beech
Sunil I. Shah
Mark Slusarski - WVDEP
Catherine A. Trinkle, Esq.
Fike Trustees

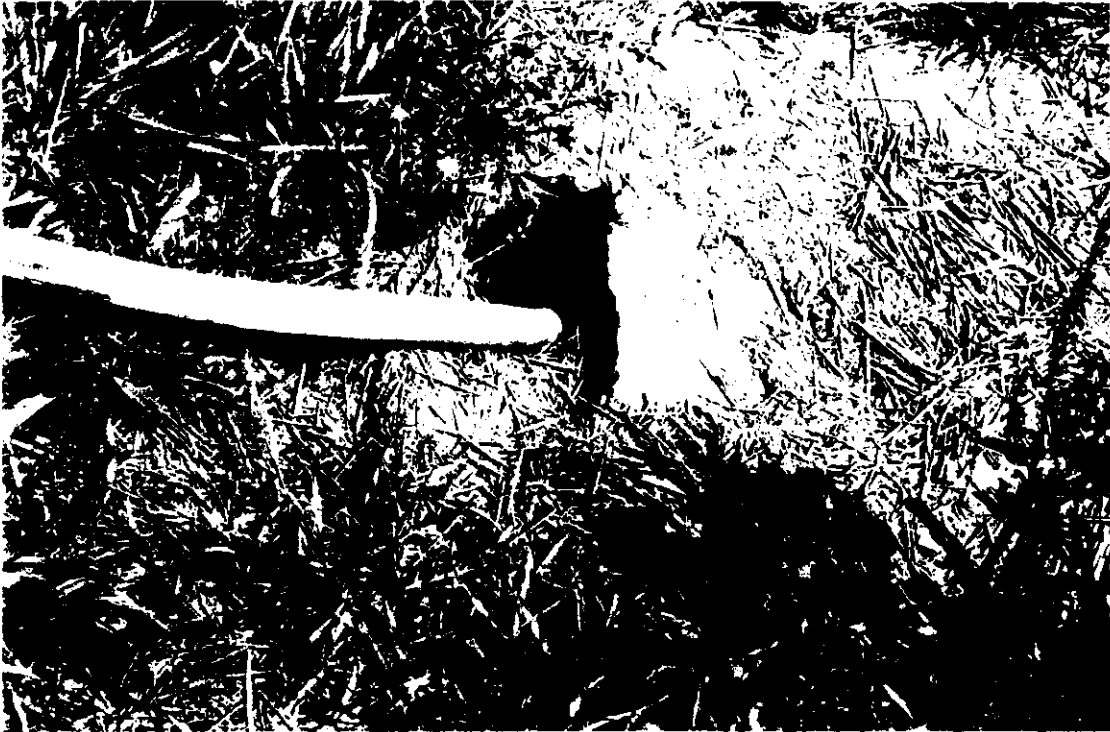


Photograph 1 - Subsidence One



Photograph 2 - Subsidence Two

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Photograph 3 - Subsidence One Being Grouted



Photograph 4 - Subsidence Two Being Grouted

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Photograph 5 - Subsidence One After Grouting



Photograph 6 - Subsidence Two After Grouting

AR301679

6/2/2000

20-40

53:10 100 25 Dec 53

Depth 21 22 23 24 25 26 27 28 29 30

PID 0.0

Dep't 31 32 33 34 35 36 37 38 39 40

PIP 6.0 ← → 90

30.8-37.5, loose, light to dark gray, slightly clayey, silty sand fine to medium grading downward to fine to coarse grained (SW), well graded, quartz rich, micaceous, organic matter, trace heavy minerals, wet.

37.5-37.9; loose, light gray ^{blk} ~~dark~~ occasionally medium gray clayey silty sandy ground (gw) well graded, granule to cobble size, wet. (Basal Conglomerate)
37.9-40. firm to soft, light gray, occasionally medium gray, sandy, silty clay to clayey silt, (cl-m) low to no plasticity micaceous, wet.

Decided to see well at 38' bgs. at base of sand,
0752 RHT w/ well assembly 0.3' 1" & dug,

20' 1" 0.010" for PVC seen, 20' 1" PVC seg. ~~~~~
0758 Begin install Global #7 filter pack and PVOH w/ pipe.

Materials & Methods

7 has Gdbb-1 #7

buffer buffer

bucket 1/4" - used here 12/20/03

1 bag Armon Col. Williams & Co. (barn. is bel)

3 bags Portland Cement

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6/2/2000

08:15 Baker Tank (2nd Arrived) 16:14-9

Well sunk 1' to approx 39' bgs.

Inscalled sand to 16' bgs, buffer sand to 14'
Bentonite to 9' bgs.

5480 beyen 22 wofen 22 set up 22 run 22

0420 tipped gourd on PW-18

04930 Set strictly well cover on p-31 w/ spacer.

1000 measured 7D of old boneholes

file + near p-4 $TD = 4.8695$, 4.8695.

Hole B inside beam near P-31 ~ 4' bgs.

1030 Phot. 16 N45 hole B near P-31 4" x 5" x 4"

1035 photo 17N-21 new p-y 4"-dia x .48"

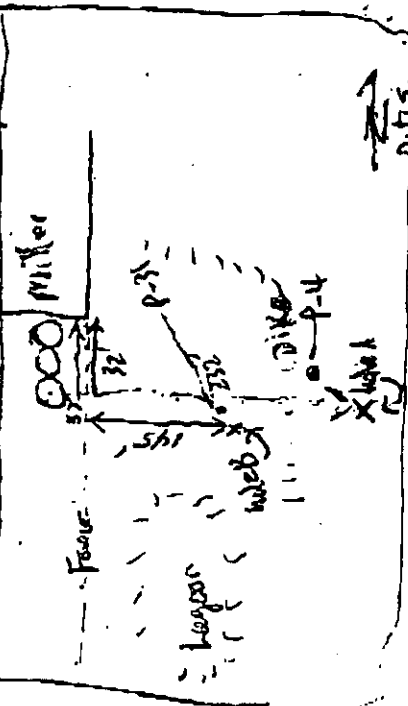
11811 pits if E-W holes
hole dips ~70° NW,
growing (N 55° E) at angle

1113 Finished pumping 10 gal. grant - tube 2

Note: $232'E + 32'S$ of the SE corner of NW 1/4

122 Pumped 10 gal (Cummins 20 gal) hole

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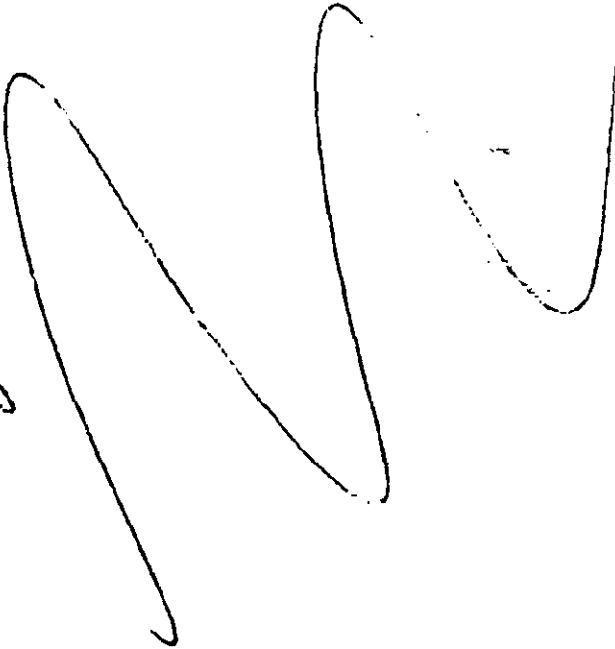


6/5/2000

06:30 Prep for Safety of Cal. Instruments (See log)
 08:00 Visit PBS re. abandonment.
 08:15 Visit Dave re. abandonment.
 08:30 Talk conversation for NW-Abandonment.
 08:55 See our means for abandonment.
 10:03 Drillers arrived at site 10:10-10:15 Safety Meeting for drillers. Organize PPE 10:30 enter EZ for rig.
 10:00 Above hole A 52' by 14" B 48' by 48' by 48'
 11:15 Arrived at P-23
 DTW 15.21' DTB 15.33 TD=16'
 11:30 Drilled to TD of 16' Water on Great Machine
 11:45 Great pump arrived
 11:47 RTH with trevise pipe attached to base
 11:50 Mixed barrier/perforated great and begin injecting great via trevise Merrill's used;
 1/4 bag of gel 2 bags of great.
 11:57 great on surface
 12:01 Clean out great pump
 12:04 Removed flush water cover - great ~ 14' by 48'
 12:06 Covered with gravel fill. Abandonment complete.
 12:14 Set up in P-22 12:30 off-site PBS
 12:30 looked at Dave area
 Need Fence Down (can under force, but still have post & string)
 5' Head to East (opposite of post) head on slab 12' by 12'
 and then replace site. 12:45 lunch

6/2/2000

11:30 Pumped 2000 30 gal in Hole B
 Photo 19 SE → NW after great Hole B
 Great is 25" by 48"
 Photo 20 E → W showing Hole A
 Photo 21 E → W after growing Hole A
 (Approx 5 gal.)
 Moved back to Hole B 11:39
 11:40 Pumped 315 gal - great to surface.
 Photo 22 E → W Hole B after Great to surface
 11:50 Drillers moved to location. Set up pump tower in afternoon.



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